



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

Program Update

October–December 2017

Welcome to the October–December 2017 issue of the U.S. Department of Energy (DOE) Office of Legacy Management (LM) Program Update. This publication is designed to provide a status of activities within LM. Please direct all comments and inquiries to lm@hq.doe.gov.



Participants at an NPS preservation workshop take a break from their work on the Pond Cabin, part of MAPR in Los Alamos, New Mexico. Photo: Minesh Bacrania



Goal 6

LM Director Visits Manhattan Project Sites

In October 2017, U.S. Department of Energy (DOE) Office of Legacy Management (LM) Director Carmelo Melendez joined other DOE and U.S. National Park Service (NPS) staff in New Mexico to be briefed on the Manhattan Project National Historical Park (MAPR) to get a better understanding of the park and related resources in the state. MAPR is managed collaboratively by DOE and NPS to preserve, interpret, and facilitate access to key historical resources associated with the U.S. Army Corps of Engineers Manhattan Project. It incorporates three of the most significant Manhattan Project sites: Los Alamos, New Mexico; Oak Ridge, Tennessee; and Hanford, Washington.

The trip began on October 23 at the National Museum of Nuclear Science and History in Albuquerque, New Mexico, where the museum's director, Jim Walther, provided insights into operating a facility dedicated to telling the story of the Atomic Age. An affiliate to the Smithsonian, the museum presents exhibits and educational programs that convey the diversity of individuals and events that shaped the historical and technical context of the nuclear era.

Director's Corner



Be sure to read the Director's Corner on page 2!

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Program Update



Goal 5

Director's Corner



**LM Director
Carmelo
Melendez**

Dear LM *Program Update* Readers,

As we begin the New Year, the U.S. Department of Energy (DOE) Office of Legacy Management's (LM) Financial, Audits, and Contracts Services (FACS) Team, led by Deborah Barr, is already hard at work fulfilling fiscal year (FY) 2018 obligations and future commitments. The FACS Team is the trustworthy steward of DOE's intergenerational legacy responsibilities and of the American tax dollars.

This talented and knowledgeable team helps LM with financial and contracting matters by providing direction in the areas of planning; oversight for budget formulation and execution; financial management; program integration; controls and oversight; internal risk management and mitigation; and acquisition.

Funding for LM's mission is requested by the administration and appropriated by Congress. These funds constitute the bulk of LM's financial resources. LM works closely with DOE management, the Office of Management and Budget (OMB), and Congress to communicate our goals, objectives, and resource requirements.

Last year was a unique budget year due to the change in Administration. Because of this, the typical budget cycle changed dramatically. LM developed three different budget projections for FY 2018: a current services budget, a requirements-based budget, and an actual budget (budget determined by the chief financial officer/OMB). LM also carried out FY 2017 activities while waiting for an appropriations bill to pass, formulated an FY 2018 budget request, and started the initial FY 2019 formulation.

This year, the FACS Team will be busy fulfilling the FY 2018 Appropriation/Continuing Resolution (apportionments, allotments, and obligations); justifying the FY 2019 President's Budget to Congress (congressional justifications, hearings, Questions for the Record, reports to congress); formulating for the FY 2020 President's Budget; and composing the 75-year estimate for Environmental Liabilities audit.

You can see DOE's FY 2018 Congressional Budget in Brief Request here:
https://energy.gov/sites/prod/files/2017/05/f34/FY2018BudgetinBrief_3.pdf.

We take our legacy responsibilities seriously, and that includes our promise to act as fiscally responsible stewards of your tax dollars.

Very respectfully,
Carmelo





<https://www.lm.doe.gov/2018lts-conference>



Goal 6

Environmental Justice Activities

Four Corners Future Forum

This interactive working conference incorporated dynamic keynote speakers, including Cheryal Lee Hills of Minnesota's Region 5 Development Commission, and Jeff Finkle, president and CEO of the International Economic Development Council. Minnesota's Region 5 Development Commission has instituted a robust collaborative action process that has leveraged more than \$40 million in public and private investments to transition and diversify the region's economy. The International Economic Development Council is the world's largest professional organization for economic development practitioners

The forum was organized by a broad pool of planning districts, nonprofit economic development organizations, academic institutions, tribal representatives, and regional private sector businesses from Arizona, Colorado, New Mexico, and Utah. The purpose was to promote cooperative planning and actions to revitalize the economy

of the four-state, multi-tribal Four Corners region, which has been heavily impacted by the downturn in oil, gas, and coal sectors.

Since the discovery of natural gas in the Four Corners in 1921, the region's main economic driver has been energy. The San Juan Basin in northwest New Mexico and Colorado contains the second largest natural gas field in the United States. More than 40,000 wells have been drilled in the San Juan Basin, helping create a robust regional industry and thousands of high-paying, skilled jobs.

Forum participants discussed issues and concerns affecting their regions. Topics included: capacity building, energy, agriculture, health, creative economy, manufacturing, tourism, and technology. They developed new visions, strategies, tools, and resources, resulting in innovative action plans for development implemented through a collaborative effort among regional partners. ❖



Goal 1

Working Group Addresses Abandoned Uranium Mines

The U.S. Department of Energy (DOE) Office of Legacy Management hosted the 2017 Abandoned Uranium Mines Working Group (AUMWG) at its Westminster, Colorado, office November 6 and 7, 2017. The AUMWG is a consortium of federal agencies, including the U.S. Department of Agriculture, DOE, U.S. Department of the Interior (DOI), and U.S. Environmental Protection Agency (EPA), working together to address the nation's 4,225 defense-related uranium mines. These mines produced uranium ore purchased by the U.S. Atomic Energy Commission, DOE's predecessor agency, between 1947 and 1970 for defense-related purposes.

The AUMWG identifies public safety, human health, and environmental challenges posed by the mines while addressing those with the greatest risks. Senior leaders, managers, and technical staff representing all agencies attended the annual meeting. The group evaluated its progress in implementing the second year of the AUMWG Strategy and Five-Year Action Plan, exchanged technical information and field approaches, and established 2018 program and field activities for each agency.

After the meeting, attendees toured the Edgar Mine in Idaho Springs, Colorado, to learn about historic mining practices and develop a better understanding of underground mine workings. They also toured the bulkhead and wastewater treatment plant at the nearby Argo Tunnel to observe and learn about technical approaches to managing and treating acid mine drainage. Representatives from the Colorado Division of Reclamation, Mining, and Safety; the Colorado School of Mines; and the Colorado Department of Public Health and Environment led the tours and shared their wealth of information and insight with the group.

The AUMWG is a model of the "one government" approach. Each agency, acting within its own authority and mission space, implements its work on the ground with the knowledge and coordination of the partner agencies in the working group. Work includes verification and

validation of mines on federal public lands. This is being addressed collaboratively with DOE, the U.S. Bureau of Land Management (BLM), and the U.S. Forest Service (USFS) under the auspices of the Defense-Related Uranium Mines (DRUM) Program. Here, DOE, BLM, and USFS are verifying and validating the condition of DRUM sites on federal public land where approximately 2,500 mines are located. This land is often used for recreational purposes such as camping and four wheeling, and dangerous mine openings can be found next to roads. DOE, BLM, USFS, and state abandoned mine land programs are collaborating to perform field inventories of mine features, gamma radiation surveys, and environmental soil and water sampling at the mines.

By conducting these activities and identifying the mines that present public safety, radiological, and chemical risks, land management agencies and abandoned mine land programs can determine which mines to close and reclaim to protect the public. EPA is also coordinating with DOI agencies and USFS, to address abandoned uranium mines posing the greatest risks to human health and environment in the Grants Mineral Belt of New Mexico and on the Navajo Nation. These agencies are working with each other and with states and tribes to assess and clean up these abandoned mines. Approximately 11 percent of the 4,225 mines are on tribal lands and other areas where

Continued on page 11



AUMWG representatives in front of the Edgar Experimental Mine.



Goal 4

Got Milk ... weed?

The decline of pollinators has been featured in the media over the past several years, as insects are vital for pollinating many of our crops and native plants. Pesticide and herbicide use, habitat loss and fragmentation, noxious weeds, disease, and even climate change are all thought to be factors in the decline.



Showy milkweed flower.

Milkweed plants (so named because of their milky sap) are pollinated by a variety of insects. However, they are best known as the host plant for the monarch butterfly. There are 73 milkweed species native to the United States. Five different milkweed species have been documented at the Rocky Flats site in Colorado, the most common being showy milkweed (*Asclepias speciosa*). Patches of showy milkweed occur along roadsides, in revegetation areas, and in native prairie areas at the site.

Helping to increase the abundance of showy milkweed and provide additional food and habitat for pollinators at the site, Rocky Flats personnel collected milkweed seed in October 2017, when the pods were getting ready to open. They placed the pods in an open-topped cardboard box and allowed them to dry for two to three weeks. During that time, the pods were moved around in the box several times to prevent mold and to allow the seeds to dry. Once the pods were dry, the seeds were separated from the attached floss by scraping the fluffy mass over a wire mesh attached to a wooden frame.

Spreading of the seeds at various locations across the site occurred this past fall and will continue into this winter.

The Ecosystem Management Team (EMT) is part of the U.S. Department of Energy (DOE) Office of Legacy Management (LM) Environmental Management System. One EMT goal is to promote conservation practices on LM lands, in accordance with national strategies and guidance, including enhancing pollinator habitat, species diversity, and ecosystem services. The “National Strategy to Promote the Health of Honey Bees and Other Pollinators,” was introduced in 2015, and DOE was identified as one of the federal agencies to implement best management practices to protect and enhance pollinator habitat. ❖



Milkweed seeds in the pod.



Separating milkweed seed from its floss.



Program Update



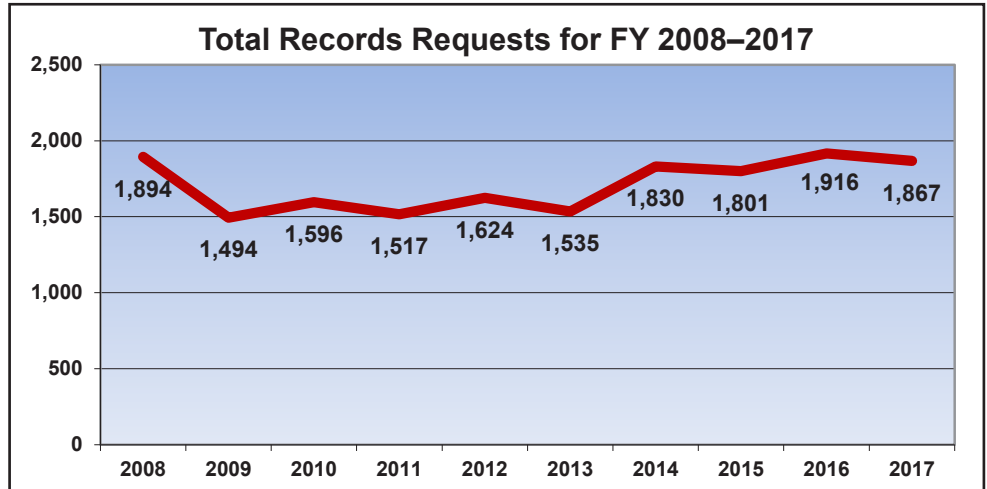
Goal 2

LM Processes High Number of Records Requests

The U.S. Department of Energy Office of Legacy Management (LM) processed nearly 1,900 records requests in fiscal year 2017. These include responses to Freedom of Information Act requests; Privacy Act requests; Energy Employees Occupational Illness Compensation Program Act (EEOICPA) claims; Yucca Mountain, Nevada, project requests; and other internal and external records requests.

As part of its commitment to preserving, protecting, and sharing records and information, LM processed more than 50 stakeholder records requests for sites remediated under the Formerly Utilized Sites Remedial Action Program (FUSRAP) in fiscal year 2017.

Under an agreement with the U.S. Department of Labor (DOL), EEOICPA requests related to FUSRAP are assigned to LM. These requests are now reviewed against a collection of Bechtel National Inc. FUSRAP remediation records from the 1990s that were recently determined to be EEOICPA-relevant. LM has enhanced the indexing for this collection to improve retrievability for all types of record requests.



EEOICPA claims from former workers, or their eligible relatives, are initiated through DOL. The records LM provides are used by DOL to determine eligibility for benefits under the program. Energy workers and their families can apply for benefits and receive other assistance for filing claims at 11 resource centers nationwide. More information about these centers and applicable forms can be found on the DOL website <https://www.dol.gov/owcp/energy/>. ❖

LM is continually seeking opportunities to protect the environment and conserve natural resources. One simple step we can take toward improving environmental consciousness is to distribute the *Program Update* newsletter by email instead of sending a printed copy.

Please send your email address and your first and last names to lm@hq.doe.gov so that we can update our database.

Thank you for your assistance.





Goal 1

FUSRAP Collaboration Between LM and USACE

On October 25, 2017, staff from the U.S. Army Corps of Engineers (USACE), the U.S. Department of Energy (DOE) Office of Legacy Management (LM), and the LM Support contractor (LMS) gathered in Pittsburgh, Pennsylvania, October 25 and 26, 2017, for the second Formerly Utilized Sites Remedial Action Program (FUSRAP) joint program meeting.

The U.S. Atomic Energy Commission (AEC) established FUSRAP in 1974 to remediate sites where radioactive contamination remained from USACE's Manhattan Project and AEC work. DOE remediated 25 sites by 1997, when Congress directed USACE to remediate the remaining 21 designated FUSRAP sites.

A Memorandum of Understanding between USACE and DOE defines the roles of each agency in administering and executing FUSRAP. USACE is responsible for the designation and remediation of FUSRAP sites. DOE is responsible for identifying the eligibility of new FUSRAP sites and for long-term stewardship after the transition period. Sites recently transitioned from USACE to LM include the Painesville, Ohio, Site in 2016 and the Linde Air Products site in Tonawanda, New York, in 2017.

The meeting helped LM and USACE better understand each other's program responsibilities, authorities, assumptions, and expectations. Attendees also identified opportunities for improved partnership. Program meetings such as this complement other combined efforts, such as interagency working groups, that serve to assure stakeholder and regulatory communities that a high level of service will be maintained throughout site transitions. Ultimately, collaborative work results in streamlined and cost-effective long-term stewardship.

USACE meeting attendees included 20 management and technical staff from six districts, headquarters, and the Environmental and Munitions Center of Expertise. LM staff included site managers from the Resource Conservation and Recovery Act/Comprehensive Environmental Response, Compensation, and Liability Act/FUSRAP Team; the Uranium Mill Tailings Radiation Control Act/Nevada Offsites Team; the Asset Management Team; and the Archives and Information Management Team.

LM currently manages 31 FUSRAP sites, a number that will increase as ongoing site remediations are completed and

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USACE, LM, and LMS attendees at the 2017 FUSRAP joint program meeting.



Goal 2

Experiencing Four Decades of Change

The present U.S. Department of Energy (DOE) Office of Legacy Management (LM) Grand Junction, Colorado, office was a much different environment 45 years ago when contractor Gordon Weaver reported for his first shift as a mainframe computer operator. At the time, the Grand Junction site functioned as an office for the U.S. Atomic Energy Commission and analyzed ore samples to determine uranium grades. It later would launch the National Uranium Reserve Evaluation (NURE) Program to map and evaluate all uranium resources throughout the United States.

Working at the Grand Junction office since 1972, Weaver experienced many of the site's technological "firsts." He was the first user to have an external computer hardwired from his office to the mainframe computer, the first to have a personal computer—initially without a hard drive and then subsequently with one—and the first to have a color monitor.

Though his educational background was in business data processing, Weaver taught himself the scientific programming language FORTRAN, derived from FORMula TRANslation, which was used to write program code for mainframe computer processing at the Grand Junction office. This led him to hold various data processing positions for the first 14 years of his career.

In 1986, Weaver was approached by the incoming contractor and asked if he would establish a records management department. While he had no formal

experience with the project, Weaver reviewed the existing DOE Order and any available National Archives and Records Administration guidance and began implementing a program.

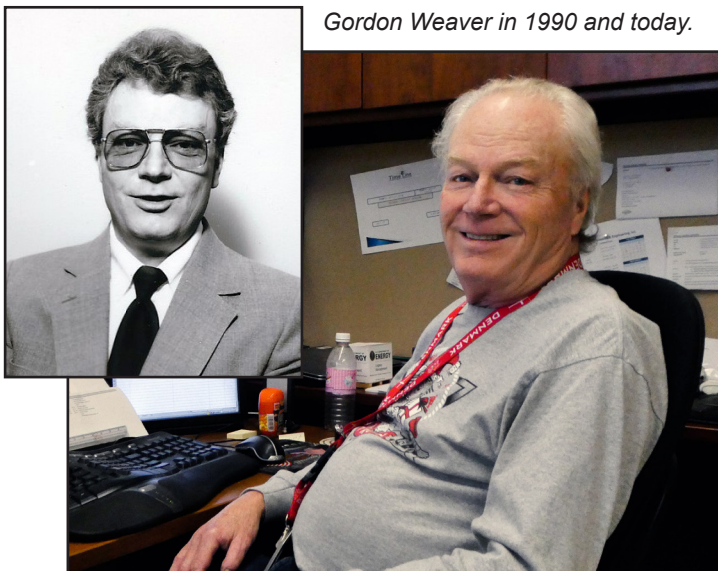
Weaver became responsible for managing and archiving records contained in the thousands of Uranium Mill Tailings Remedial Action vicinity property remediation case files, in addition to all other federal records at the Grand Junction office. With assistance from a couple of retired U.S. Atomic Energy Commission employees, Weaver gained invaluable hands-on experience evaluating and dispositioning all the boxes, drawers, and stacks of paper records housed in Grand Junction's vaults.

This was the beginning of a records program that would grow to include developing a file plan structure and a Records Inventory Disposition Schedule that was user-friendly enough for all personnel to understand.

Weaver has always tried to make records management accessible for all users. He prides himself on "developing the records program in a manner that was simple, easy to understand, and appropriate for our environment and stakeholder needs."

Weaver's vast records management proficiency earned him the admiration of many colleagues over the years. LM Records Program Analyst Jeanie Gueretta has fond memories of working with Weaver at the Grand Junction office over the past 20 years. "Gordon Weaver's contributions to the DOE records management community have been invaluable and his records management knowledge and expertise have shaped the LM records program into what we have today. Over the years, I've learned so much from Gordon, and I'm privileged to work with such a great mentor and colleague."

While four decades understandably has ups and downs, Weaver's tenure has been an overall good experience and one of the reasons he has deferred his retirement. "I have enjoyed my experience and the changes in my career here at the Grand Junction office, along with working with some really great and knowledgeable people," Weaver said. He has been passing along his vast knowledge and lessons learned to other colleagues because, while he does not have a specific date in mind yet, Weaver knows retirement could come calling "in an instant." ❖



Gordon Weaver in 1990 and today.



Goal 6

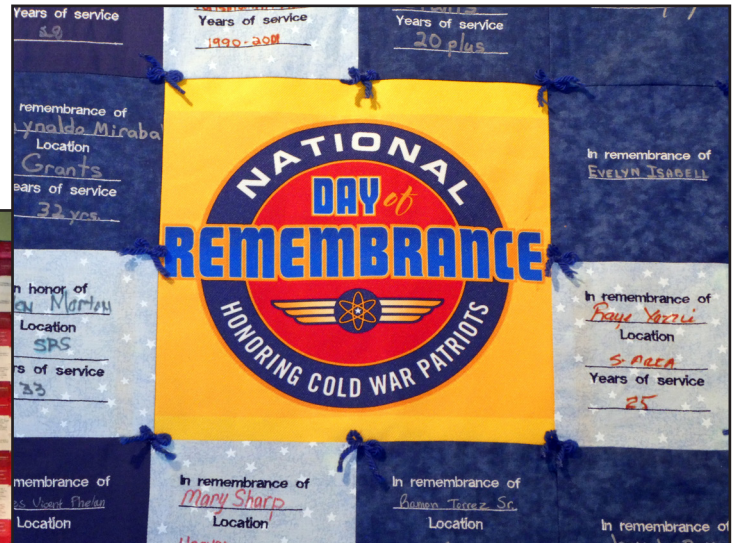
Commemorative Quilt Displayed at Fernald Preserve

This past September, the Fernald Preserve Visitors Center in Ohio was one of the sites privileged to host an exhibition of the traveling Cold War Patriots Quilt Project. The nearly 11 feet tall and 17 feet wide American flag quilt is made of fabric squares, each honoring a nuclear weapons worker or uranium worker. The project pays tribute to the scores of individuals who worked tirelessly at numerous locations across the country, often in secrecy, to ensure the safety of our nation. Visitors to the quilt display were able to peruse the 1,050 names featured on this patriotic piece of textile art.

Some people found the names of friends, neighbors, family, former co-workers, or even themselves on one of the red, white, or blue pieces. ❖



Visitors look over the large American flag quilt.



National Day of Remembrance is celebrated in October to recognize Cold War workers.

For up-to-date LM news, be sure to visit LM's website and LinkedIn page.



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Goal 4

Innovative Restoration Monitoring Research Conducted at the Fernald Preserve

The U.S. Department of Energy Office of Legacy Management (LM) is partnering with the U.S. Geological Survey and the U.S. Army Corp of Engineers on a restoration monitoring research project at the Fernald Preserve, Ohio, Site. This effort is funded by the U.S. Department of the Interior's Natural Resource Damage Assessment and Restoration Program. The multi-agency group is called the Grassland and Upland Hardwood Monitoring (GUHM) Team. They are tasked with investigating innovative technologies for assessing the success of ecological restoration projects. The GUHM Team contacted the Ohio Environmental Protection Agency (Ohio EPA) in early 2017 regarding potential candidate sites and Ohio EPA suggested that the agency contact LM at the Fernald site. Everyone agreed on the proposal and after finalizing the Proper Use Memorandum and authorization for site access documents, detailed planning was completed with the assistance of site personnel.

In late August, the GUHM Team collected a variety of vegetation data in restored forest and grassland communities. A multi-tiered approach was used, which included simultaneous evaluation of communities from a large landscape perspective to precise species scale. Several field crews were involved in data collection. Ground-based teams collected traditional species-level metrics in forests and grasslands. An unmanned aircraft system (UAS) team implemented a variety of flight plans using several different sensors, including hyperspectral imaging and light detection and ranging survey methods. A demonstration of UAS and field data collection was provided to Ohio EPA and stakeholders on August 25. On August 26, a fixed-wing flyover was conducted. Additional landscape-scale data was collected via satellite.

The goal of this effort is to compare remote sensing technology to traditional field surveys to develop optimal monitoring strategies for restoration projects. Researchers are evaluating the different approaches based on effectiveness and level of effort. The Fernald Preserve is an ideal candidate for this type of evaluation because the site has undergone extensive forest and grassland restoration and has a traditional restoration monitoring program already in place. Data analysis and reporting are anticipated in late 2018. ❖



A UAS gathers data on the restored prairie community at the Fernald Preserve.



The GUHM Team demonstrates innovative new techniques for forest community data collection.



Continued from page 4

Working Group Addresses Abandoned Uranium Mines

poverty, linguistic isolation, limited educational opportunities, and other factors contribute to increased vulnerability to pollution. Leveraging knowledge and resources to support each other's efforts has proven useful for agencies addressing issues associated with abandoned uranium mines.

The AUMWG is now implementing the third year of the Five-Year Action Plan. Monthly teleconference calls are held to track program and field activity progress and to exchange best practices and lessons learned. Through multi-agency efforts, the AUMWG continues to identify available resources and expertise at the federal, state, and tribal levels. By marshalling the resources of multiple agencies and taking a one-government approach, the AUMWG is able to effectively identify and address high-priority mines in a cost-effective, coordinated, and well-managed fashion. ❖



Argo Tunnel bulkhead.



AUMWG touring the Argo Tunnel wastewater treatment plant.



Continued from page 1

LM Director Visits Manhattan Project Sites



DOE staff learned about the history of Ancestral Pueblo people and the Manhattan Project in Bandelier National Monument.

The following day, the group traveled to the “Trinity” test site, where the Manhattan Project set off the world’s first nuclear explosion. The site is located in what is now the White Sands Missile Range. The U.S. Army controls the missile range and it arranged for Public Affairs specialists Chuck Roberts and Jim Eckles to lead the tour. Eckles, now retired after 30 years of experience at White Sands, shared how the U.S. Department of Defense handles tourists at an active missile range. Each year White Sands allows the public to visit the Trinity site on the first Saturday in April and October.

The group next traveled to Los Alamos, where Manhattan Project personnel designed and built the world’s first atomic bombs. On October 25, the Los Alamos Field Office National Security Missions Assistant Manager Jody Pugh welcomed everyone on behalf of the National Nuclear Security Administration. After an introduction to the site by Director Linda Deck of the Los Alamos National Laboratory’s (LANL) Bradbury Museum, the group boarded a bus with LANL Historian Ellen McGehee to explore DOE-owned sites that are part of MAPR. A highlight of the day’s tour was watching U.S. National Park Service (NPS) staff work on preserving the park’s historic Pond Cabin. After the tour, the group returned to the Bradbury Museum to view exhibits and meet with LANL Historian Alan Carr.

On day four, the group visited NPS’s Bandelier National Monument. Superintendent Jason Lott and Preservation Specialist J.T. Stark shared how the monument’s historic

Frijoles Canyon Lodge was used by the Manhattan Project as living quarters and as a respite from the pressures of the laboratory. The group also learned about the Ancestral Pueblo people who lived in Frijoles Canyon for more than 400 years, from approximately 1150 CE to 1550 CE.

Returning to Los Alamos, the group took a guided downtown tour with Los Alamos Historical Society Executive Director Heather McClenahan. In addition to seeing where Manhattan Project scientists lived and worked, the group visited the historic Romero Cabin to learn about the homesteaders who were displaced by the laboratory. The day ended with NPS’s Kirby–Lynn Shedlowski and Vanessa Lacayo sharing an overview of how NPS engages with the public.

In addition, Melendez, LM Director of Site Operations David Shafer, and MAPR DOE Principal Representative Tracy Atkins met with the DOE Office of Environmental Management Los Alamos Deputy Site Manager Stephen Hoffman and Attorney-Adviser Ben Underwood to discuss ongoing collaboration on the Bayo Canyon, New Mexico, Site.

The trip helped strengthen DOE and NPS’s partnership in co-managing MAPR. In addition to Director Melendez and those mentioned above, the week’s busy itinerary brought

Continued on page 13



DOE, NPS, and Los Alamos County staff learned about homesteaders displaced by the Manhattan Project at the Los Alamos County Historical Society’s Romero Cabin.



Continued from page 12

LM Director Visits Manhattan Project Sites

together MAPR Los Alamos DOE Site Representative Vicki Loucks, MAPR Hanford DOE Site Representative Colleen French, MAPR Oak Ridge DOE Site Representative Jonathan Sitzlar, NPS MAPR Superintendent Kris Kirby, MAPR Los Alamos NPS Site Representative Charles Strickfaden, DOE Chief Historian Erick Boyle, LM Program Analyst Padraic Benson, and MAPR Project Manager within Los Alamos County Linda Matteson.



Participants at an NPS workshop hone their preservation skills on the MAPR Pond Cabin.
Photo: Minesh Bacrania

“It was useful to learn about the broader Manhattan Project connections in the Los Alamos area,” Director Melendez noted at the end of the trip. “In particular, seeing the park sites firsthand provided us with a better understanding of the logistics associated with future public visitation. We appreciate the ongoing work by our DOE, NPS, and community partners in moving the park forward and in preserving the resources and stories of the Manhattan Project.” ❖



DOE and NPS staff visited the Trinity site, where Manhattan Project personnel detonated the world's first nuclear device.

Continued from page 7

FUSRAP Collaboration Between LM and USACE

sites are transferred from USACE to LM. USACE has transferred long-term stewardship responsibilities for six FUSRAP sites since LM's establishment in 2003. It is anticipated that USACE will complete remedial activities and start transitioning six additional FUSRAP sites over the next five years:

- Colonie Interim Storage Site (Colonie, New York)
- Combustion Engineering Site (Windsor, Connecticut)
- DuPont Chamber Works (Deepwater, New Jersey)
- Iowa Army Ammunition Plant (Des Moines County, Iowa)
- Middlesex Sampling Plant (Deepwater, New Jersey)
- Shpack Landfill (Attleboro, Massachusetts)

Stewardship responsibilities for many incoming sites will be greater than for those currently under LM stewardship.

Effective collaboration between LM and USACE will be essential to fully understand these complex sites and their long-term requirements.

Much like the first FUSRAP joint program meeting held in 2015, both agencies found this year's meeting to be a great success and look forward to continued future collaboration.

“It was extremely helpful to meet face-to-face with our Army Corps counterparts and understand where we can add value during all steps of the site transition and transfer process,” said LM's FUSRAP program manager, Cliff Carpenter.

USACE's FUSRAP program manager, Nicki Fatherly, shared Carpenter's sentiment, observing that, “Besides strengthening the current working relationships between our two organizations, this year's meeting will lead to significant workflow improvements and increase our effectiveness in transferring sites in the future.” ❖



Goal 6

2017 Tribal Outreach Year-in-Review

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) has long recognized the importance of tribal partnerships and having meaningful involvement from representatives of the community regarding work performed at legacy sites on tribal lands.

In addition to outreach activities involving the Northern Arapaho in Riverton, Wyoming; Alaskan Native communities; State and Tribal Government Working Groups; and various educational and technical events, LM conducted year-round outreach on the Navajo Nation, where it has responsibility for four former uranium milling sites.

From mid-July to mid-November, LM and its contractor staff engaged in nine tribal community events that reached more than 1,200 people. These outreach events began with the Eastern Navajo Fair in Crownpoint, New Mexico, from July 20 to 22, and ended with the Monument Valley Balloon Festival in Utah on November 17 and 18. At LM's booths, interested parties received information pertaining to the former sites and current stewardship activities. Part of the outreach included addressing the 2014 Five-Year Plan, *Federal Actions to Address Impacts of Uranium Contamination in the Navajo Nation*.

More than 400 people signed LM's guest book at the Northern Navajo Nation Fair in Shiprock, New Mexico. "I enjoyed meeting members of the Navajo community and talking about DOE activities surrounding the Shiprock disposal cell," said Mark Kautsky, LM Shiprock site manager.

This past fall, LM hosted their second annual round of open houses at the Tuba City Chapter House and the Moenkopi Legacy Inn and Suites in Arizona. Tours of the former Rare Metals Uranium Mill Site immediately followed each of the open houses. Feedback from the surrounding communities and representation from Hopi officials contributed to the overall success of this outreach.

DOE was joined by Navajo tribal staff and representatives from the U.S. Nuclear Regulatory Commission, Indian Health Service, U.S. Environmental Protection Agency (EPA), Agency for Toxic Substances and Diseases Registry, the Navajo Nation Abandoned Mine Lands Reclamation/ Uranium Mill Tailings Remedial Action (UMTRA) Department, Navajo EPA, EPA Region 9, Navajo Nation Division of Health Community Health Representative Program, Bureau of Indian Affairs, Navajo Abandoned Uranium Mines Trust, and the Hopi Tribe.



Tribal and federal entities participate in a tribal outreach event at the Navajo Nation Fair in September. Left to right: Angelita Denny (LM site manager), Chrissy Largo (LM contractor public affairs specialist), Jamie Rayman (ATSDR), Priscilla Tom (Navajo EPA), and Milton Bluehouse Jr. (LM contractor Navajo Nation Community Outreach Network liaison).



A geochemist (LM contractor) demonstrates groundwater concepts at the American Indian Science and Engineering Society Conference, in Denver, Colorado.

For a list of several other tribal outreach events that LM hosted or participated in during 2017, see page 15. ❖



Program Update

March

- Open house and site tour for tribal partners
– Shiprock, New Mexico



November

- STGWG Fall Meeting
– San Antonio, Texas
- 15th National Governors Association's Combined Intergovernmental Meeting
– San Antonio, Texas
- 2017 Navajo Nation Division of Natural Resources Summit
– Flagstaff, Arizona

May

- 2017 National Tribal Energy Summit
– Washington, DC
- State and Tribal Government Working Group (STGWG) Spring Meeting
– Washington, DC
- Technical Visit – *Demonstrate DOE's long-term commitment to continued protectiveness of LM sites*
– Navajo Nation/Hopi Tribe sites



October

- 2017 Science, Technology, Engineering, and Mathematics Fall Festival
– Tsailie, Arizona (Diné College)

LM 2017 TRIBAL OUTREACH EVENTS

January	February	March	April	May	June	July	August	September	October	November	December
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- "SATURDAY ACADEMY" – *Organized by the Tribal Environmental Education Outreach Program at Northern Arizona University*
– Tuba City, Arizona
- Environmental and Natural Resource Conference – *Hosted by the Northern Arapaho Natural Resource Office*
– Riverton, Wyoming
- Area schools site visits
– Tuba City, Arizona

April



- American Indian Science and Engineering Society National Conference/Career Fair
– Denver, Colorado
- Chariot Site update meeting with the Point Hope City Council and the Village of Point Hope Tribal Council
– Point Hope, Alaska

September

- Two management meetings with Navajo Nation and Hopi Tribe UMTRA departments
– Grand Junction, Colorado

July



- Five-Year Cooperative Agreement with Northern Arapaho Tribe
– Riverton, Wyoming

December



Goal 6

LM NEWS Feed

Visit <https://energy.gov/lm/listings/lm-news> to access these articles in the LM NEWS Feed.

DECEMBER 19, 2017

Repairs Improve Calibration Facilities

Work to repair instrument calibration facilities in Grand Junction, Colorado, is completed.

DECEMBER 19, 2017

LM Issues Cooperative Agreement in Riverton, Wyoming

Cooperative agreement supports LM's mission to partner with the Northern Arapaho Tribe in overseeing management of the Riverton processing site.

DECEMBER 18, 2017

DOE Announces Plan to Modernize Department

U.S. Department of Energy announces intent to modernize the agency's organizational structure.

DECEMBER 4, 2017

LM Director Visits Atomic Age Sites

LM Director joined DOE and NPS staff in a tour of the Manhattan Project National Historical Park and other nuclear era sites in New Mexico.

NOVEMBER 21, 2017

LM Director Speaks at the 2017 Intergovernmental Meeting with DOE

LM joins multiple organizations to discuss cleanup of the DOE nuclear weapons complex.

NOVEMBER 20, 2017

LM Updates Wastewater Treatment Facility at the Fernald Site

A time-lapse video shows the removal of aging wastewater treatment tanks in preparation for a new treatment system.

NOVEMBER 3, 2017

Diné College—2017 Fall STEM Festival

Educational festival engages Navajo Nation students in science, technology, engineering, and mathematics.

NOVEMBER 2, 2017

LM's Fernald Site Featured in DOE Podcast

"The Office of Legacy Management isn't burying the Department of Energy's history—just the contaminants left behind."

OCTOBER 26, 2017 "Uranium Mania," a Controversial Legacy

Rocky Mountain PBS series spotlights Colorado uranium mining.



Program Update

LM Goals



1 Protect Human Health and the Environment



2 Preserve, Protect, and Share Records and Information



3 Safeguard Former Contractor Workers Retirement Benefits



4 Sustainably Manage and Optimize the Use of Land and Assets



5 Sustain Management Excellence



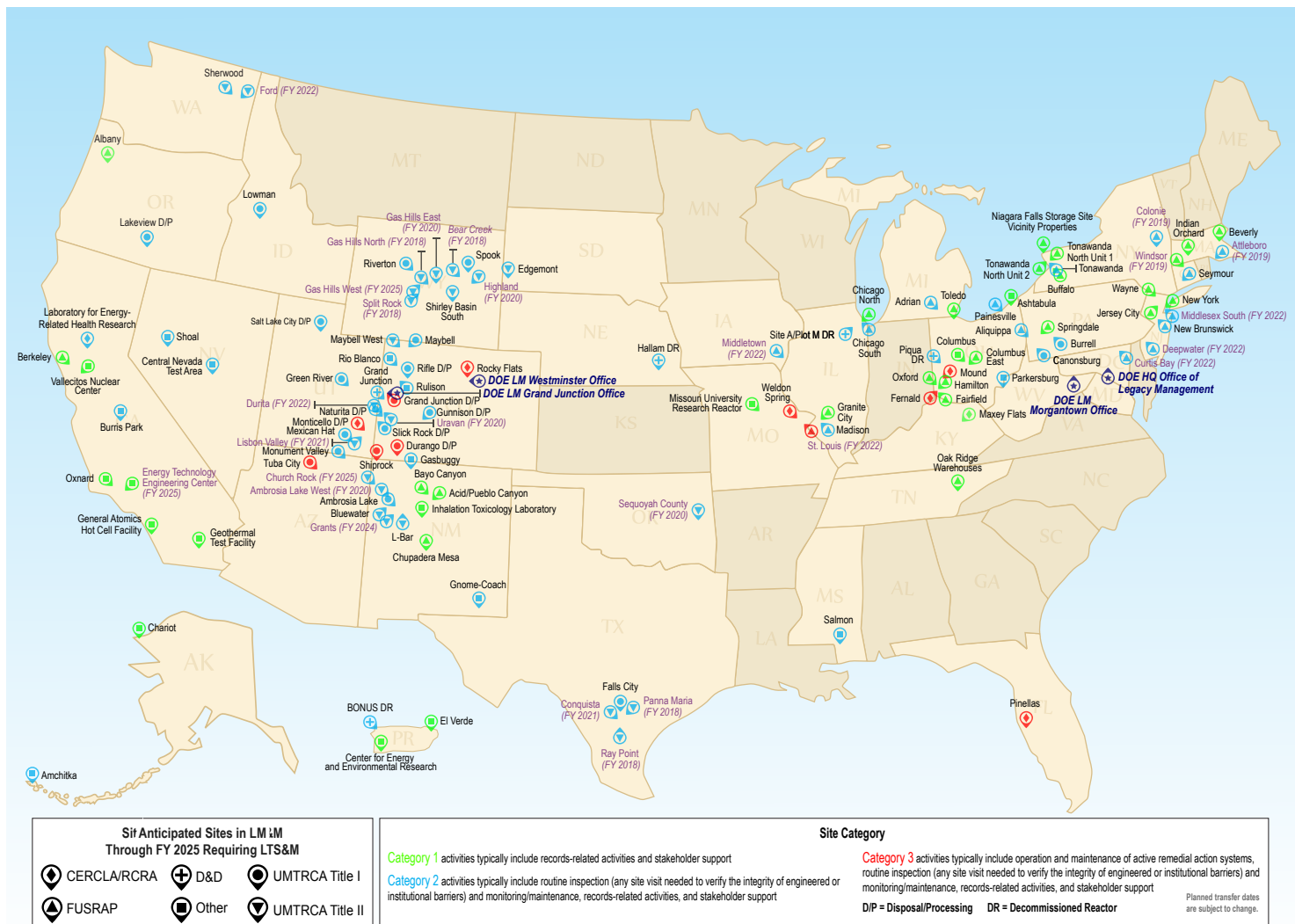
6 Engage the Public, Governments, and Interested Parties



U.S. Department of Energy
Office of Legacy Management

Program Update

Anticipated LM Sites Through FY 2025





U.S. DEPARTMENT OF
ENERGY

Legacy
Management

1000 Independence Avenue, SW
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U.S. Department of Energy
Office of Legacy Management

Program Update

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